HUMANITIES INSTITUTE
Paul Clark, Ph.D.

JAPANESE ARCHITECTURE

Overview

No matter the time or the place, carpenters and designers/architects have used the materials around them to construct buildings: adobe in the American southwest, stones in the Middle East, light wooden frames with mud or stucco just about anywhere there was a minimum supply of timber. In areas with a bounteous supply of trees, such as Japan, buildings were constructed almost entirely of wood for the vast majority of recorded history. The design of structures reflected both the possibilities and the limitations inherent in the building materials. For Japan, this meant structures were not built to last centuries, but rather a few decades. Earthquakes and fires were also common occurrences, which made quick and (relatively) inexpensive rebuilding a priority. With the exception of castles, few structures were taller than two stories.

There are a number of features of the traditional Japanese architectural aesthetic that have stood the test of time. For example, Japanese dwellings are still built with a significant wood component. Interior partitions for rooms are sliding panels (*fusuma)*—cloth or paper (*shoji)* or some combination. Traditional homes are distinguished by a covered veranda (*engawa)* which also acts as a narrow porch and walkway. Floors for most of recorded history have been made of either wood or *tatami* mats (tightly woven soft rush plants). Homes are distinguished by an entryway (*genkan*), which is a place to stop and remove one's shoes and an alcove (*tokonoma*) where one might display ikebana or calligraphy. Until the early 19th century, roofs were almost exclusively thatch, wood or fired terra cotta tiles, and were hip and gable in design. Architects preferred sharp, clear lines, open floor plans with natural light and simple, restrained design. This traditional aesthetic emerged in the 8th and 9th centuries and reached maturity in the 15th century.

Pre-History (Jōmon Period, 10,000-300BCE)

Dwellings in Jōmon Japan were utilitarian in nature. People lived in close quarters and in very small groups. As the Jōmon people transitioned from rudimentary shelters, they began to construct circular wooden huts around shallow fire pits. These pit houses were composed of upright wooden pillars, walls were built of mud or straw and roofs thatched with grass or reeds. Later in the period, square or rectangular structures were built that would accommodate larger groups of people but were still constructed of similar building materials. Roofs of the larger buildings required stronger and more complex support structures. Late in the period, some of these rectangular buildings were large enough to have acted as public meeting houses, but, in the absence of written records, this is difficult to verify. There is no evidence in the archaeological record that any of the larger buildings were used for religious purposes. Jōmon era people were undoubtedly skilled in basic carpentry, joinery, thatching and wooden construction techniques. Where and when these skills were developed is unknown. However, dwellings of similar design have been found on the Korean peninsula and other areas on the Asian mainland.

Storage buildings have also been found in the archaeological record for these periods. Early in the era, they resembled very rudimentary huts in construction, except the pits were larger and deeper. Jōmon people stored their foodstuffs in ceramic pots in these pits, but there was likely not enough capacity to get through entire seasons and certainly not enough to navigate years of drought. Later in the period, it is believed that storage huts were raised off the ground and had wooden floors. There is disagreement among scholars about whether or not these pillar-supported structures were only used for storage or if they could also have been used as homes. Nonetheless, it is believed that their raised-floor design resembled architecture from Micronesia, which is one of the arguments scholars have used to forward the "south seas" theory of migration to Japan in the Jōmon period.

Though rudimentary, Jōmon structures served their purpose of sheltering their inhabitants from the elements. They were largely waterproof and protected the inhabitants (and

supplies) from the rain, wind and cold. They were dark, however, and could easily be infested with pests. The extent of interior adornments and precise external appearance is not possible to know. As hunter-gatherers, the Jōmon people needed to be able to (relatively) quickly construct these structures. Nonetheless, building these structures required considerable knowledge, effort and resources. Late in the period, some structures, however, were quite large. In one famous example, a village in the Sannai-Maruyama archaeological site boasted a longhouse that measured at least 32 meters long.[1] Longhouses, in particular, likely functioned as community buildings and not single-family homes.

A reconstructed Jōmon era pit house.[2]

The Ancient Era (Yayoi Period, 300BCE-300CE)

The shift from the Jōmon era to the Yayoi era in Japan took place over several centuries, during which time there was considerable cultural continuity. What distinguishes the Yayoi era from the late Jōmon era, however, was the appearance of a different people group and a relatively quick transition to settled agriculture. Archaeologists believe this happened quickly because migrants from the mainland brought this knowledge with them. Once there, it spread rapidly. Yayoi Japanese rather suddenly (in archaeological terms) began to produce rice using patterns of farming we know as "wet rice" agriculture. It is no coincidence that this happened at approximately the same time as bronze and iron-making technology began to appear in Japan. These innovations transformed Japan in profound and fundamental ways and allowed for the creation of Japanese culture. Indeed, rice still plays a central role in Japanese culture and cuisine. Wet rice agriculture was (and still is) very labor intensive. Land must be cleared, irrigation ditches dug and low dikes must be constructed and maintained. Iron tools helped make this possible. It is important to note, however, that wooden tools were used alongside iron-tipped farm implements and tools used in carpentry. Long-term residence therefore became essential in the Yayoi period in order to facilitate rice production. Structures become more important and permanent, were more resource intensive and required ever greater levels of expertise to construct. Villages and societies emerged, as did local and regional elites whose job it was to protect and administer agricultural infrastructure and limited resources.[3]

Wet rice agriculture requires a great deal of water and a relatively warm climate to cultivate. This places limits on where migrants to Japan during this time period likely came from to include Korea or central China, since rice farming had long been established in these places. For many decades, it has been generally settled scholarship that most migrants came from Korea during this period, a theory that has yet to be definitively disproven. Recently, however, advances in plant DNA technology have allowed us to determine that Japanese short grain rice is most closely connected to the rice grown in the Yangzi River Valley in China. This indicates that either migrants brought the same strain of rice to Japan from central China at roughly the same time or—and this is more likely—this particular strain of rice originated in central China and made its way to Japan via Korea. This importation of knowledge and skills is reflected in the construction and appearance of dwellings and other structures of the era as well. Yayoi period

structures do not look precisely like those in Korea or China, but roof line, distinctive finials, pillar placement and construction techniques share similarities.

Reconstructed main meeting building in Yoshinogari village.[4]

Evidence in the archaeological record for migration during the Yayoi period from Southeast Asia is also compelling. Scholars, such as Ann Kumar, have made this argument. Evidence for this includes distinctive architectural elements in large buildings and the forging of certain kinds of metal objects used in religious ceremonies. In particular, the X-style ridgeline (sometimes capped by a decorative finial) on larger structures in indicative of architectural designs found in Micronesia. These are known as *chigi* (forked-roof finials)

Reconstructed Yayoi era dwelling and storage building.[5]

Yayoi era dwellings were larger, more refined and more permanent than that which is evident from the Jōmon period. It is important to note that modest, family residences remained much the same…as did many of the building materials even for village leaders and elites. Larger homes (and other structures) were often raised on stilts/poles (as found in Micronesia) and showed sophisticated joinery techniques. Mortise and tenon construction has been found in the archaeological record, as have steps built of a single piece of wood. Roofs were still thatched, but reinforced with wooden planks and with some flared surface. It is unclear what advantage flared roofs provided, indicating that perhaps this was a design feature only. Some dwellings were round and some were rectangular. Structures of the Yayoi period often had straight, reinforced rooflines with a flourish of upturned ends running the length of the building.

A reconstructed public building in Yoshinogari village.

Some tribal chieftains and other elites lived in large structures and in fortified villages. In Yoshinogari Historical Park in Norther Kyushu, for example, archaeologists have found large structures that measured 12.5 X 12.5 meters. This village (now partially reconstructed) came complete with city walls, watchtowers, ceremonial halls, large, raised-floor residences and the like. Entrances into the fortified village were "key-shaped," which followed the Chinese pattern of walled cities and kept outsiders from having line of sight into the village from outside and allowed for overlapping lines of fire when under attack. Some scholars even believe that this could be the compound of Queen Himiko of Yamatai, mentioned in Chinese documents of the era. [6]

The Classical Era (Nara and Heian Periods, 710-1185)

In the years between the end of the Yayoi period in 300 CE and the beginning of the Nara period, one of the most important social and cultural developments was the appearance of religion. The indigenous religion of Japan is called Shintō (the Way of the Gods), a faith that likely had its origins in the Yayoi period but was clearly identifiable by the 5th and 6th centuries. Buddhism also appeared in Japan in the 6th century, as the Yamato clan began to emerge as the dominant political and military force in the country. Much more is known about when and how Buddhism arrived in Japan than how and when Shintō emerged. These religious institutions and the Yamato family (Imperial family) still endure, although in greatly changed form. All three have made important contributions to the architecture of Japan.

Shintō Architecture

The oldest Shintō shrine in Japan is believed to be the Izumo Shrine, which is located on the Japan Sea in southern Honshū. No exact date for its first construction is extant, however, the *Kojiki* (Records of Ancient Matters, 712 CE) indicates that it had long been in existence when the work was written. The Shrine today has been reconstructed numerous times, but the archaeological evidence suggests that the basic style of architecture has not changed dramatically and floor plan, in particular, is believed to be much the same. The main buildings were constructed in the *taishi-zukuri* style. Many characteristic elements of this design were already found in structures of the Yayoi period, but were more highly refined and clarified in later periods. Included among its most distinguishing characteristics is the *chigi* (forked-roof finials) rooflines and a raised floor built on poles/stilts. Other design elements include planked walls and high, gable ends. In the instance of the Grand Hall at Izumo, the earliest structures are reported to have been built 96 meters high (likely an exaggeration and currently rebuilt to 24 meters tall). It is not known whether or not the original structures were painted, and if they were, the extent of their adornment. Roof material was wood (and straw and/or bark in the early iterations).[7]

Izumo Shrine building.[8]

Another design characteristic found in all Shintō shrines is a gate, which demarcates profane space (unconsecrated) from profound space (consecrated). These gates are called *torii* and can be found nationwide near shrines both large and small. Japanese torii are one of the most recognizable architectural elements in all the world. Early *torii* were called *shinmei* and were simple, unadorned, roughhewn and unpainted. Most were tall enough for an adult to walk under and were composed of two vertical poles topped by a straight lintel (*kasagi*) and another straight brace (*nuki*) below. Poles (*hashira*) and lintel were joined at a 90° angle. It should be noted that gates of a similar nature can be found in Korea, China and even Vietnam. How, when or if this design might have made their way to Japan is unknown. In the centuries since their first appearance, *torii* have become highly refined, quite large and richly adorned with brightly-colored paint, upturned *kasagi* and many different kinds of flourishes.

The oldest known torii in Japan, entrance to Nonomiya Shrine in Kyoto, appeared in *Tale of Genji,* 10th or 11th century. Notice the raw, unfinished wood.[9]

Buddhist Architecture

Prince Shōtoku (574-622 CE) commissioned the building of a number of Buddhist temples in the late 6th and early 7th centuries in an effort to promote the faith in Japan. As son of an emperor and regent to at least one monarch, he wielded immense power and enjoyed some access to the imperial treasury. One of the most prominent temples attributed to him is the Hōryūji complex in Nara, a city that became Japan's first permanent capital. Archaeologists believe that his palace adjoined the temple complex. The first iteration of the Hōryūji complex was completed in 607, but much was lost to a fire in 670. Its reconstruction was completed in 711 in much the same style as the previous one. The central pillar in the main pagoda was felled in 594 (according to dendrochronologists), indicating that the pagoda (and its nearby main hall) might well be original and marking it as one of the oldest wooden structures still in existence anywhere in the world.

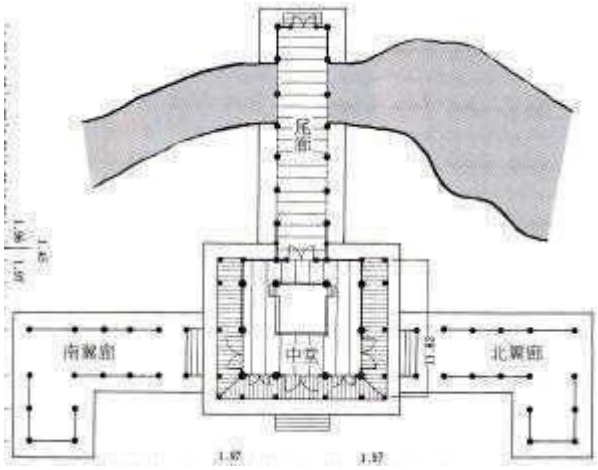
The buildings in the Hōryūji complex were likely designed by Korean architects and built in the fashion of Buddhist temples in China. History records that Prince Shōtoku looked to the

Sui Dynasty (581-618) and Tang Dynasty (618-907) in China for cultural, political and spiritual inspiration as he sought to fashion Japanese society into a more cohesive country. For him, religion was more than a faith, it was also a tool for weaving together a fragmented society and a means by which he could legitimize imperial rule. All of the structures at Hōryūji were believed to have been built of wood (partially or completely painted) when reconstructed in 711. In a testament to the skill of the Japanese carpenters, many of the central structures endure 1400 years later in a country that suffers from regular seismic activity! Of particular note is Kondo (Main) hall, which is among the oldest wooden structures in the world.[10] It is built on a stone platform (as on the mainland) and is two stories tall. It has a hip and gable roof, enclosed porch and tapered columns. In a departure from previous epochs, the roof is composed of terra cotta tiles. Directly beside Kondo hall is the five-story pagoda. Like Kondo hall, it has a stone platform that acts as a foundation. It also has a central column that is more 100 feet tall, which acts as the structure's anchor. Flexible timber joints provide the pliability necessary to withstand earthquakes. Scholars believe that these two structures represent the oldest, most authentic Buddhist-inspired buildings in East Asia.

Kondo hall and pagoda at the Hōryūji complex.[11]

In the 780s, the Emperor Kammu (r. 781-806) decided to move the capital city from Nara to what would become the city of Heian-kyō.[12] In 794, the city had been deemed sufficiently habitable by the Emperor and his official residence changed. This ushered in the golden era of classical Japan known as the Heian period (794-1185). This was a time during which the consolidation and centralization efforts initiated by the Yamato emperors in Nara paid great dividends. In the early centuries of the Heian period, the state was well formed and functioned largely as designed. There was peace in the land, a clear hierarchy among the aristocracy, a strong tax base and a stable peasantry. Heian-kyō was a planned city, which, unlike Nara, was laid out on a grid with wide boulevards crossing at 90° angles. City blocks were sub-divided by smaller streets as found in the Tang capital city of Chang'An in China.

In the Heian period, the Japanese architectural aesthetic reached maturity for the classical era. Innovations continued, but most were variations on the existing theme. One example is the Phoenix Hall of Byōdoin temple which was completed in 1053 in the *shinden-zukuri* style of aristocratic residences by the regent Fujiwara Yorimichi (992-1071).[13] This complex originated as a Fujiwara family villa (the dominant political power in the land during the era) and converted to a Buddhist temple thereafter. Mainland influence is unmistakable in Phoenix Hall, but it has a clear Japanese flourish. The Phoenix Hall is a square structure with large, open rooms that provided pleasant views of the gardens, pond and grounds. It is a sophisticated and ornate structure with ample flourishes. Covered L-shaped passageways are found on each side of the main hall, with a long rear exit complete with a bridge over portions of the pond. Internal columns hold up a terra cotta roof which has wide eaves. Two golden phoenix statues adorn the roof. When viewed from above, it is said to resemble a Phoenix with outstretched wings.[14] It would not be an exaggeration to say this is the most highly regarded, emblematic structure of classical Japan. Indeed, its image can be found on the back of the 10-yen coin. Recently, it has been designated a National Treasure by the Japanese government and is a UNESCO World Heritage site.



Bird's-eye view of Byōdoin temple near Kyoto.[15]

Exterior view of Byōdoin temple near Kyoto.[16]

The Medieval Era (Kamakura, Muromachi and Warring States Periods)

There was a return to simplicity in architecture after the slow dissolution of the Heian state that began in the years following the establishment of the Kamakura Shogunate in 1185. The first shogun, Yoritomo Minamoto (1147-1199), purposefully stayed away from the political machinations and other trappings of power and wealth that existed in Kyoto. Though the official capital remained the city of Kyoto, a great deal of real political power shifted to the city of Kamakura. Over time, the landed aristocracy of Kyoto found themselves in competition with a new, warrior aristocracy some distance away. In the struggle for power and resources over several generations, the old courters faded into relative obscurity. Warriors in the Kamakura era were initially more abstemious and navigated towards to a more frugal, simple lifestyle. Indeed, the form of government in the Kamakura era is called a *bakufu*, which is translated as "tent government." Military funding was a higher priority than the building of large, ornate, grandiose structures. In addition, the Tang dynasty had collapsed in 907 and China fell into political chaos for a time. Korea too underwent a period of political instability. Japan's architects and political leadership no longer looked to the mainland for inspiration and developed a unique aesthetic all their own.

The architectural aesthetic of the warrior era(s) reflected the dominance of Buddhism in Japan. Though there were several major sects, one small, particularly austere form enjoyed outsized influence: Zen Buddhism. Zen arrived in Japan in the 12th century, at a time when it was one of the most powerful sects in China. Zen is a monastic faith, and its adherents spend their days in meditation. This appealed to the warrior elites, who wanted their soldiers to be able to endure extreme hardship and privation when commanded. The object of Zen Buddhism was (and is) to clear the mind of earthly attachments and to dedicate one's self to meditation. The

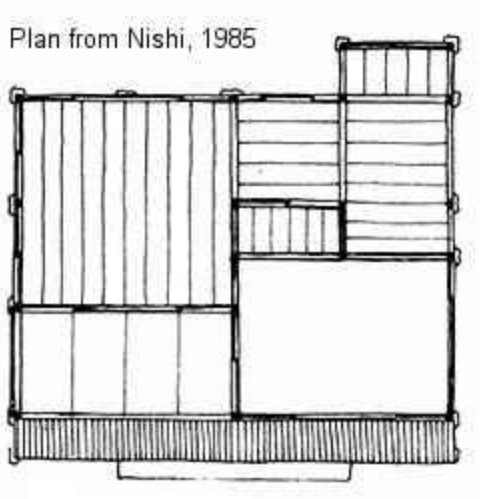
monastic life is reflective and thrives best in a quiet, serene setting. Though most Japanese (then as now) were unable to live up to the Zen ideal, it became an aesthetic that is still associated with the medieval period. This is reflected in the architecture of the era.

The Zen aesthetic emphasizes the simple and contemplative. Buildings and grounds were designed to facilitate quite meditation, to create an environment in which enlightenment may be attained. Rectangle structures of the previous eras with covered, ornate walks and heavy, intricate roofs gave way to simple, delicate, square structures that emphasizes the austere lifestyle. The most representative example of Zen architecture of the era is Ginkakuji (the Silver Pavilion). It should be noted that the main hall was never gilded in silver, as had been the intention of its designers. It therefore stands in contrast to Kinkakuji (the Golden Pavilion), which is also in Kyoto. Construction on Ginkakuji was completed in 1482. It was initially built as a villa for the shogun Ashikaga Yoshimasa (1436-1490), who is widely regarded by historians as being responsible for the apocalyptic conflict known as the Ōnin War (1467-1477) during which time the city of Kyoto was razed to the ground. It also marked the end of central authority for more than a century and the beginning of the Warring States Period (1467-1600). The design and construction of Ginkakuji reflected the dire financial condition of the Ashikaga shogunate and necessarily made simplicity a virtue.

The main hall (Hondo) of Ginkakuji is a square structure built in the *Shoin* style, which emphasizes modesty of scale. *Shoin* means "writing room," which means that one of the only pieces of furniture is a writing desk. The main floor is modest and can be subdivided into smaller rooms with screens doors/partitions that can be opened or closed for different configurations. Some elements of the doors are *shoji* (paper) which allows for privacy when closed but also permits some natural light to enter. Other partitions/doors are wooden (*fusuma*). Some of the floors are wood, others are made of compressed, tightly woven, multiple-layered rice straw fastened with either hemp or cotton known as *tatami* mats. This is particularly true of Kannon-den hall, a nearby structure. Each mat is 3 feet by 6 feet. Today, room size is still measured in Japan by the number of tatami mats that fit comfortably inside. Hondo Hall has an alcove, which is a small area on the side of a room in which staggered shelves provide a space *ikebana* or calligraphy can be displayed.

The roof line in Hondo Hall (and Kannon-den) is in pyramid form and resembles the low, wide designs found in Buddhist structures in previous epochs. The roof is constructed of cypress bark and has a brass Phoenix that adorns its peak. Both of these buildings have been designated national treasures and are believed to be original.[17] These features, *shoji* doors, *tatami* mats and decorative alcove have since been adopted nationwide as design features found in most traditional structures in succeeding epochs.

The main buildings alone at Ginkakuji are not particularly impressive, even for the era in which they were built. What distinguishes Ginkakuji is it gardens and grounds. The gardens are highly manicured and come with many of the features that exemplify the Zen aesthetic. The temple complex was built on the side a mountain, has a rock garden that can be changed daily and features a water element. Trees and shrubs are carefully groomed to resemble nature, but are in fact, shaped and molded to meet the Zen aesthetic.



Layout of the first floor of Kondo hall at the Ginkakuji complex.[18]

Kondo Hall at Ginkakuji and gardens.[19]

The Modern Era (Tokugawa/Edo Period 1603-1868)

The chaos and bloodshed of the Warring States period (1477-1603) forever changed Japan. There had been no central authority for most of the period and politics on the regional and national level had been rather Darwinian in nature. As Japan emerged from this period, a redefined aesthetic found expression under the long military dictatorship of the Tokugawa shoguns. Incorporating building designs from the previous periods when structures reflected by necessity simple, austere dwellings that could be easily and quickly reconstructed, the re-imposition of stability and law and order provided architects the opportunity to distill their designs.

During the Edo period, dwellings were to exist in nature, to be surrounded by and complemented by nature in a symbiotic and harmonious relationship. Given the exponential growth of cities and large towns all over the country during this period, this became a challenge. Large residences often had an enclosed garden, which would be accessed by a veranda/outside covered walkway that would provide the natural environment so coveted by urban Japanese. Building materials had not changed much from the previous epoch and were largely composed of wood; raw and largely unpainted and untreated. Doors were made of paper (*shoji*) and *tatami* mats adorned the floors. There were no traditional beds (European style), no chairs, no carpets, few window dressings to keep out the winter drafts and in general, few creature comforts or furniture save for a few chests for storing a futon and other bedding items. Exterior walls were often composed of wooden planks and/or covered in white plaster. This aesthetic had been in evidence before, but during this period, it became the aspirational home design, the standard for a traditional home that still exists today.

A typical Edo period home.[20]

Edo period dwellings could be single or multi-storied structures. Roofs of more modest homes were often made of thatched materials. In cities and market towns, two story dwellings often had a dual purpose. Portions of the first floor were spaces where commerce could be conducted and second floors were residences. But the design of even the first floor resembled a traditional dwelling, except perhaps floors were made of wood rather than *tatami* and there were counters and tables on which wares could be displayed. *Shoji* doors still divided space even in commercial space. There were few internal hallways and movement between rooms most often took place on covered, exterior walkways that doubled a porch or veranda.

The military dictatorship of the Tokugawa shoguns provided the long-sought peace and stability in which commerce could thrive and population could flourish. However, the government very severely restricted mobility. Permission had to be obtained for anyone: samurai, peasant, skilled craftsman or merchant to move from place to place within the country. For the peasantry, one of the few times in life they could obtain approval to travel was on a religious pilgrimage…and they did indeed travel with great relish and in great numbers. The temple and shrine complex in the city of Nikko provided one such grand destination.[21] The city of Nikko was and is home to a temple and shrine complex composed of dozens of Shinto and Buddhist structures. The most famous shrine in Nikko is Tōshō-gū, in which the spirit of the founder of the Tokugawa shogunate has been enshrined: Tokugawa Ieyasu. It was built initially by Ieyasu's son and successor Hidetada and expanded by his grandson and Hidetada's successor, Iemitsu. Unlike in the previous epoch, where the lack of resources necessitated modest buildings, Tōshō-gū suffered from no lack of funds. Many of the buildings are of traditional design and are square or rectangle wooden structures built on stone foundations. The roofs are made of terra cotta tiles and are of hip and gable design with wide eaves. Roof lines are straight with turned up ends topped with a statue of an animal or other flourish. The structure of the buildings reflect a Japanese sensibility but are colorful and ornate, and harken back to the continental style and grandeur of the Heian period. Most of the buildings are lavish and colorful. The main shrine is even partially gilded in gold leaf. The carvings are exquisite, intricate and detailed…some might even describe them as exuberant. The Yomei Gate (Yomeimon) is adorned with perhaps the most delicate and intricate carvings found anywhere in Japan. Portions of it are gilded in gold and the carvings are layered in interwoven designs, including mythical animals. Included in other buildings is the famous "three monkeys" who see no evil, hear no evil and speak no evil. The buildings were show places and designed to delight, awe and astonish visitors, and to demonstrate the wealth, power and grandeur of the Tokugawa government.

Yomei Gate.[22]

Hear no evil, speak no evil, see no evil. At Toshogu Shrine in Nikko.[23]

The 19th century

Traditional architectural design and building techniques continued to evolve slowly, but there was little perceptible change for much of the 19th century in the long-established aesthetic. The Meiji Restoration of 1868, however, was a watershed moment for Japan and provided opportunities that were unimaginable in previous centuries. As the reforms of the Restoration began to take effect, the new Japanese government both brought in Western specialists to teach in Japan and sent significant numbers of young men abroad to study all things Western, including western architecture. Among those who took advantage of this was the architect, Tatsuno Kingo (1854-1919).

Tatsuno first studied at the Imperial College of Engineering and then abroad at the University of London. He was commissioned to design the Bank of Japan in 1890, a structure that was completed in 1896. It was the first institutional structure built in the modern style in Japan. Its design is best described as Neo-Baroque, and is about as far from traditional Japanese design as is possible. Instead of wood, the building is largely built of steel reinforced brick, with a stone veneer. It has a central court yard and is distinguished by long colonnades and a central, domed roof. The structure is robust and its walls are heavy and imposing. It exudes a sense of strength, stability and permanence. The building was not seriously damaged in the Great Kanto Earthquake of 1923. However, the dome caught fire and was destroyed in the conflagration that engulfed the surrounding neighborhoods (and much of Tokyo) in the days thereafter. The current dome is a reconstruction of the original.

View of the Bank of Japan headquarters.[24]

The 20th century

While institutional structures increasingly were designed with a modern aesthetic and constructed of concrete or brick in the first half of the 20th century, the traditional Japanese architectural sensibility dominated for dwellings. Wood remained the primary building material. Houses continued to be square (or mostly so), designed with a *genkan* (entry way) and *engawa* (veranda). Floors were *tatami* mats, sliding doors were made of paper (*shoji*) or wood (*fusuma*), and roofs were hip and gable. Wood was relatively cheap and accessible and allowed for relatively quick (re)construction in a country that needed to recover often from the damage that accompanied regular earthquakes. Wood could also absorb some shaking motion. However, wood was also impermanent and burned easily. In the aftermath of the war and reconstruction in the 1950s, 60s and 70s, Japanese architects began to design homes that used concrete, brick and other more permanent materials. This freed builders and designers from the constraints of the traditional Japanese aesthetic, but also meant that the distinctive Japanese dwelling slowly went out of fashion.

The wood to concrete (or tile, siding or stucco) transition did not mean that all elements of the traditional Japanese aesthetic were abandoned. Most modern homes (and apartments) in Japan retain some traditional elements. Two story homes are common and simplicity and sophistication of design is still valued, as are open, airy floor plans that allow for maximum natural light. The *genkan* is evident in almost all dwellings and remains a place to removes one's shoes and transition to interior space. Many homes still have at least one *tatami* mat room. Others still have a *tokonomo* (alcove) and sliding doors remain ubiquitous, although they are often now composed of sound deadening material and not just paper or thin wood. Roofs have a low pitch and material is very often terra cotta tiles or metal alloy. Designers still prefer clean lines and wood for interior walls and pillars. Modern Japanese homes vary just as greatly as modern homes found anywhere in the world. The design of Japanese homes is boundless and limited only by one's imagination.

A contemporary, square concrete home.[25]

A new, traditional style home. [26]

A contemporary home with some traditional design.[27]

[1] June 3, 2004, Sannai-Maruyama Site preservation office, 2004, Cultural Properties protection division, Aomori Prefectural Board of Education, pg 9. See also Junko Habu, *Ancient Jōmon of Japan,* Cambridge University Press, Cambridge, UK, 2004, pp. 57-132.
[2]https://human.libretexts.org/Courses/Evergreen_Valley_College/A_World_Perspective_of_Art_AppreciatiAp_%28Gustlin_and_Gustlin%29/03%3A_The_First_Civilizations_and_their_Art__%285000_BCE__1901_BCE%29/3.7%3A_Early_Jomon_Period_%285000_BCE__2500_BCE%29, Accessed January 20, 2025
[3] Junko Habu, *Ancient Jōmon of Japan,* Cambridge University Press, Cambridge, UK, 2004, pp. 142-150.
[4] https://www.yoshinogari.jp/en/introduction/restore/kitanaikaku/, Accessed January 20, 2025.
[5] https://www.shizuoka-tour.com/2020/01/06/toro-ruins-by-saki/, accessed January 20, 2025
[6] https://www.yoshinogari.jp/en/introduction/restore/minaminaikaku/, accessed January 20, 2025.
[7] The current iteration of the Izumo Kankou Association, *Visit Izumo*, June 10, 2024. https://www.izumo-kankou.gr.jp
[8] https://www.izumo-kankou.gr.jp/english/4760, January 20, 2025.
[9] https://arashiyamabambooforest.com/nonomiya-shrine/, accessed January 20, 2025.
[10] All ancient wooden structures in Japan are carefully monitored and regularly maintained. Wooden beams and columns are replaced when necessary. On several occasions in the last millennium, buildings in the Hōryūji complex have been completely disassembled. It is therefore hard to quantify how much of each of the structures might be original.
[11] https://en.japantravel.com/places/nara/horyuji/58, accessed January 20, 2025.
[12] The name of this city would eventually change to Kyoto.
[13] Yorimichi was the son of the most famous of all Fujiwara regents, Michinaga (966-1028). Michinaga was likely the Shining Prince in Murasaki Shikibu's *Tale of Genji* (1021 CE). It is believed that portions of this complex had one time been the abode of the Emperor Yozei (876-884).
[14] Ann Marshall, https://www.webpages.uidaho.edu/arch499/nonwest/japan3/byodoin.htm, accessed June 18, 2024.
[15] https://ameblo.jp/miyakonokohori/entry-12729604568.html, accessed June 18.
[16] https://www.byodoin.or.jp/en/learn/architecture/, access January 20, 2025.
[17] Ann Marshall, https://www.webpages.uidaho.edu/arch499/nonwest/japan3/ginkakuji.htm, accessed July 8, 2024.
[18] https://www.webpages.uidaho.edu/arch499/nonwest/japan3/ginkakuji.htm, accessed January 20, 2025.
[19] https://www.jrailpass.com/blog/ginkakuji-silver-pavillion, accessed January 20, 2025.
[20] https://tokyofox.net/wp-content/uploads/2012/07/p1010215.jpg, accessed January 20, 2025,
[21] It was not uncommon before the Meiji period for there to be a blending of Buddhist and Shintō religions.
[22] https://thegate12.com/spot/1086, accessed January 9, 2025.
[23] https://travel.gaijinpot.com/nikko-toshogu-shrine/, accessed January 20, 2025.
[24] https://www.asahi.com/ajw/articles/15434085, accessed January 9, 2025.
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